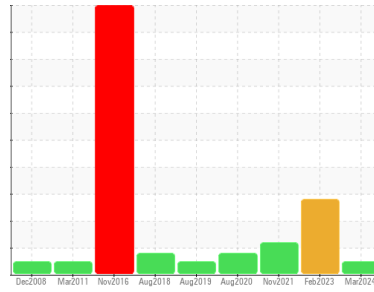




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER SM 15 2730989 (S/N 1008)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KCPA016949	KCP55581	KCP43367
Sample Date	Client Info			28 Mar 2024	10 Feb 2023	09 Nov 2021
Machine Age	hrs	Client Info		35390	30613	27465
Oil Age	hrs	Client Info		3200	3148	2876
Oil Changed	Client Info			Not Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	<1	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	3	6	9
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

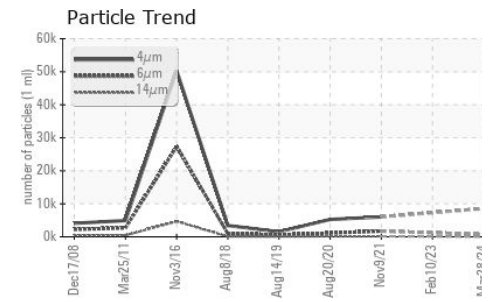
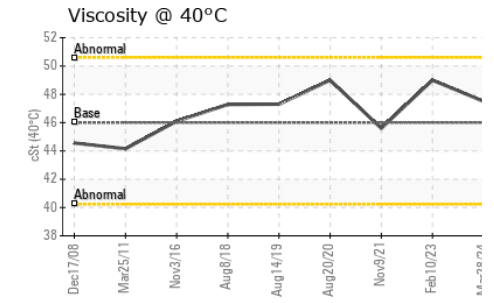
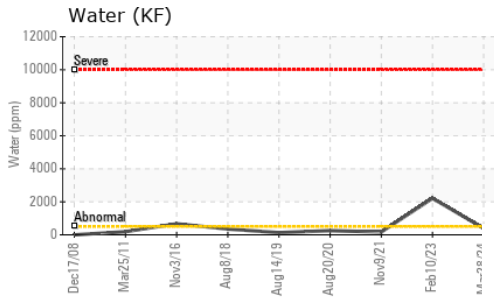
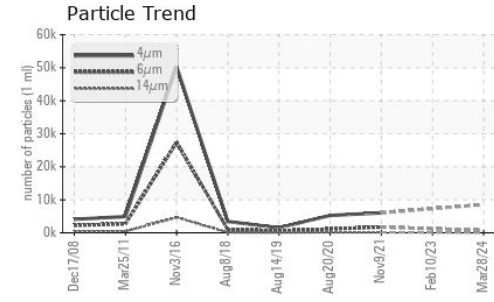
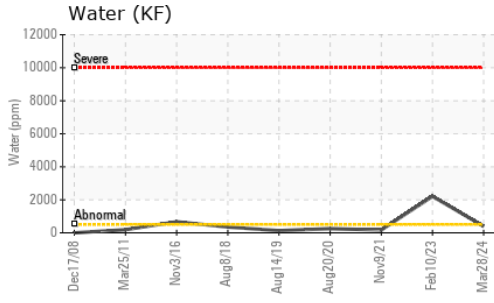
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	5	6	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	90	34	42	29
Calcium	ppm	ASTM D5185m	2	0	0	0
Phosphorus	ppm	ASTM D5185m		0	2	2
Zinc	ppm	ASTM D5185m		14	34	40
Sulfur	ppm	ASTM D5185m		22146	21514	16073

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	0
Sodium	ppm	ASTM D5185m		10	10	2
Potassium	ppm	ASTM D5185m	>20	2	<1	4
Water	%	ASTM D6304	>0.05	0.039	▲ 0.221	0.017
ppm Water	ppm	ASTM D6304	>500	399	▲ 2210	172.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		8573	---	6028
Particles >6µm		ASTM D7647	>1300	690	---	● 1721
Particles >14µm		ASTM D7647	>80	13	---	● 143
Particles >21µm		ASTM D7647	>20	3	---	● 30
Particles >38µm		ASTM D7647	>4	0	---	2
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	20/17/11	---	● 18/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.37	0.433	0.327

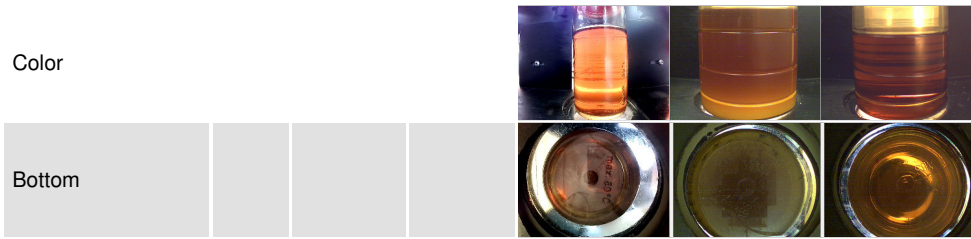
OIL ANALYSIS REPORT



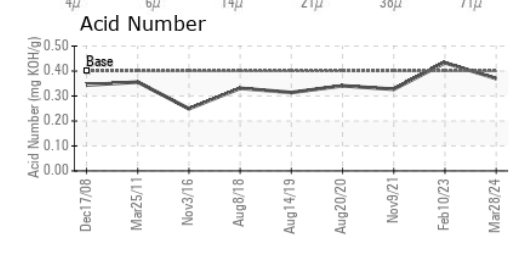
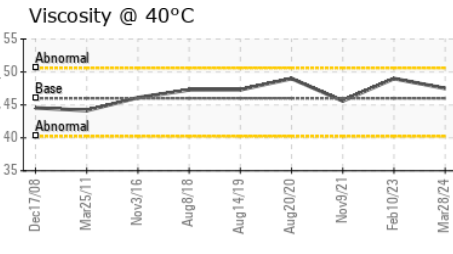
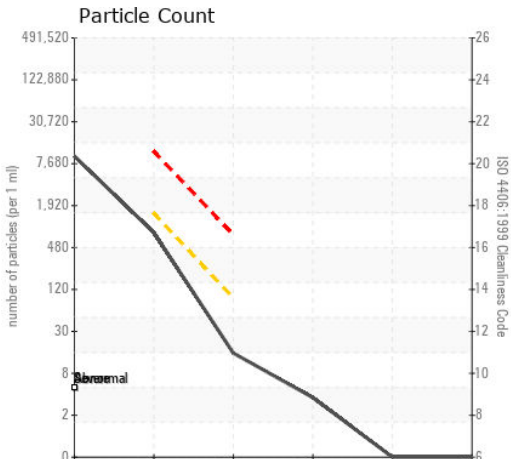
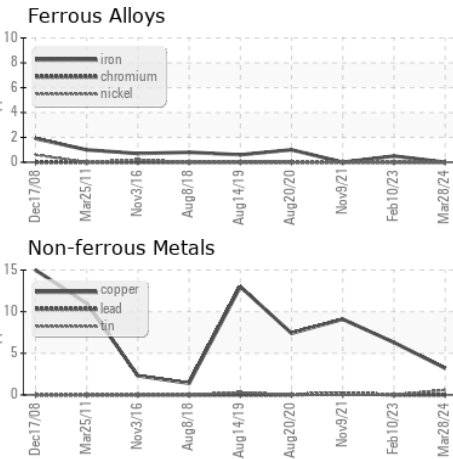
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	47.5	49.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016949
Lab Number : 06136901
Unique Number : 10956366
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 02 Apr 2024
Tested : 03 Apr 2024
Diagnosed : 04 Apr 2024 - Don Baldrige

PENSKE TRUCKING
 818 PEACH STREET
 POPLAR BLUFF, MO
 US 63901
 Contact: SERVICE MANAGER

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
F: